Matt-

I spoke to the engineer on the water extension project and the superintendant of the Michigan City Dept. of Water Works and his inspector.

Plans from Haas & Associates called for the water main to pass over the top of the culvert and allowed "less than 5' of cover in this area". However, at the time of construction as the actual grade existed, there would have been an unacceptable much less than 5' of cover over the water lines (refer to previous photos) and another route had to be determined. D&M foreman contacted Michigan City Water Dept. The superintendant approved the water main to be installed under the culvert. When the crew exposed the culvert pipe it was found to be rotted. D&M cut and removed a section of the rotted culvert and inserted a new piece (in the manner I described previously) to take its place. The city inspector's notes (Sept 1, 2005) reflect the poor condition of the culvert and that when installation was complete there was 1 ft. between the culvert and the water line below.

So to answer your questions:

According to the contractor it is not uncommon to use a slightly smaller pipe inserted into a larger one and join them together in a case like this. A larger same size pipe would have been impossible to join together with bands due to such a state of decay.

Repairing the culvert was not a part of the plans. We found the drainage pipe in bad condition. We were to, and did, install water lines around it. But because it was worn and not holding water in this section, the foreman decided to give the pipe a bottom for water to pass thru.

Val Blumenfeld Brown Inc. 219-872-8618

----Original Message-----

From: Ohl.Matthew@epamail.epa.gov [mailto:Ohl.Matthew@epamail.epa.gov]

Sent: Thursday, May 05, 2011 10:58 AM

To: Val Blumenfeld

Cc: DSullivan@NiSource.com; Lisa Bradley; Thurlow.Timothy@epamail.epa.gov

Subject: Re: Town of Pines @ Ardendale

Good morning Val:

Thank you for your response. I understand that the section of existing

4 ft. diameter pipe that was removed was replaced with a 3 ft. diameter pipe. Do you know the reason for using a smaller pipe? Do you have drawings and specifications for this part of the municipal water service extension project showing how this pipe was to be repaired after the water lines were installed? Thank you.

Matthew J. Ohl Remedial Project Manager United States Environmental Protection Agency 77 West Jackson Boulevard, SR-6J Chicago, IL 60604-3590

phone: 312.886.4442

fax: 312.692.2447

e-mail: ohl.matthew@epa.gov

From: "Val Blumenfeld" < VBLUMENFELD@bibtc.com>

To: Matthew Ohl/R5/USEPA/US@EPA

Cc: < <u>DSullivan@NiSource.com</u>>, Timothy Thurlow/R5/USEPA/US@EPA, "Lisa Bradley"

<lbradley@ensr.aecom.com>

Date: 05/04/2011 05:02 PM

Subject: Town of Pines @ Ardendale

Hi Matt-

I spoke to Allen Murray and the contractor involved in the installation of the Michigan City municipal water system in the Town of Pines.

As Project Coordinator I should have been notified by the Town of the problems at the Ardendale Ave. culvert if they thought it was due to construction of the municipal water lines (this culvert is not part of the new city system-it is either county or town property). D&M Excavating was a subcontractor on the Town of Pines Groundwater Removal Action project and was under my direction. Instead the decision was made, without input from Brown Inc. or D&M that the town culvert was plugged due to something done during construction. So in 2007 D&M was

"hired" by the Town to return to Ardendale Ave. culvert and jet out the buildup of brush and get the water flowing. It is not uncommon for culverts in the area to be clogged due to rodent activity and the fact that the county no longer does much cleaning/dredging, especially near the National Lakeshore. Lowlands are often flooded. D&M has provided this type maintenance for other towns with similar problems.

The Town refused to pay D&M for their services.

According to Ryan Miller at D&M, when the municipal water lines went in along the west side of Ardendale Ave. the existing metal culvert crossing under Ardendale was in very poor condition. A smaller plastic pipe was connected to the existing metal culvert to allow city water lines to pass under. Road wrap (fabric) is commonly used to connect two ends and keep debris from getting into the pipe. Speed crete was used as a joining material. The area was backfilled with stone. INDOT now only allows the use of metal pipe if it is coated. Plastic pipe is widely accepted for these kinds of jobs and is not considered an inferior product. The foreman on the project at the time believes that this was the best way to continue to use the old town culvert without damaging it. Town of Pines Street Dept. may have records of how old that culvert could be.

Mr. Murray told me earlier this week that a contractor had in the recent past been hired to force a pole through the culvert to dislodge the brush. This could have caused some damage to an uncoated pipe weakened by age.

What I can suggest is that the next time the Town of Pines notices any deterioration in the road or shoulder at that culvert, I be notified. We can assess the situation then with all parties on site. I will watch that section of road for erosion of any kind as well.

I can also provide the name of the trapper we use.

If you have any questions please let me know. Val Blumenfeld Brown Inc. 219-872-8618